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CLAIMS

[Claim(s)]

[Claim 1] It is the display-control approach in the equipment which waits for an operator's directions input to a predetermined input selection demand, and performs consecutiveness display processing while displaying the character image accompanied by expression on a display. Whenever it performs said input selection demand in connection with said character image, the elapsed time from immediately after a demand is clocked in the invisible condition to said operator. The display-control approach of the character image characterized by changing the expression of the character image [on display] concerned when this elapsed time reaches the idle time of said directions input and said directions input is not made.

[Claim 2] when you reach said idle time, said directions input should do -- the display-control approach according to claim 2 characterized by controlling the contents of said consecutiveness display processing to differ from the case where said directions input is made when there is nothing.

[Claim 3] It is the display-control approach according to claim 1 or 2 which said character image is alternatively displayed out of two or more character images, and is characterized by said idle time being time amount defined with the function of the standard idle time beforehand defined for every character image, and the predetermined parameter based on the directions input situation of said operator's past to a character image on display.

[Claim 4] Said standard idle time is the display-control approach according to claim 3 characterized by being the time amount set up according to the character description about each character image.

[Claim 5] Said parameter is the display-control approach according to claim 3 characterized by being the multiplier to which said idle time of the next time about the character image concerned is changed according to the directions input situation over a character image on display.

[Claim 6] The display-control approach of either [which is characterized by for the expression of said character image making said parameter reflect in a predetermined love advance element, and forming it] claim 1 thru/or the either of 5 given in a term.

[Claim 7] The display control characterized by providing the following An image-processing means to display the character image accompanied by expression on a display A demand presentation means to show an operator a predetermined input selection demand the time check which clocks the elapsed time after showing said input selection demand in the invisible condition to said operator — a means an idle—time decision means to determine the idle time of the directions input to said said input selection demand, and the time of said elapsed time reaching said idle time — said — directions—input—do — a means to change the expression of the character image [on display when there is nothing] concerned

[Claim 8] Said idle-time decision means is an image-display control unit according to claim 7 characterized by to be constituted including a means compute said idle time based on a function with the standard idle time defined beforehand, about the newest parameter read from the exchangeable memory which stored the predetermined parameter updated based on the directions input situation of said operator's past to said character image, and said memory, and the character image concerned.

[Claim 9] The image display control unit of claim 7 ** characterized by having a screen interface means to display the screen for an input for performing said directions input interactively on said display.

[Claim 10] The image display control unit according to claim 7 characterized by having a voice input means to perform said directions input through voice.

[Claim 11] The record medium with which the program code for performing the following processing was recorded on the computer connected to an indicating equipment and a data entry unit and in which computer reading is possible.

(1) The processing to which the character image accompanied by expression is displayed on said display, (2) Processing which clocks the elapsed time from immediately after a demand in the invisible condition to an operator while showing an operator the predetermined input selection demand in connection with said character image, (3) — the processing which determines the idle time found about said character image,

and (4) — the processing to which the expression of the character image [on display when said elapsed time reaches said idle time and there is no directions input from said data entry unit] concerned is changed.

[Claim 12] The processing which determines said idle time is a record medium according to claim 11 which acquires the standard idle time beforehand defined about the character image concerned, and the predetermined parameter based on the directions input situation of said operator's past to the character image concerned, and is characterized by being the processing which determines said idle time based on such acquired information.

[Claim 13] Said program code is a record medium according to claim 11 or 12 characterized by making said computer perform further processing which updates said parameter according to said directions input situation by said operator.

[Claim 14] The processing which updates said parameter is a record medium according to claim 13 characterized by being the processing which updates said parameter so that the next idle time over the character image concerned may become short when said directions input by said operator cannot be found.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[Field of the Invention] This invention relates to the image display control technique for changing dynamically the display gestalt of the character image for example, in video game equipment etc. according to the existence of a directions input to a predetermined input selection demand.

[0002]

[Description of the Prior Art] In recent years, development of a variety of simulation-game equipments (the following, SLG) is prosperous. It not only operates the behavior of the character image which appears recently, but it gives story nature to the game itself and development of SLG which raised interest nature is performed. [0003] There is love SLG it was made to make one of the SLGs which gave story nature promote the love feeling of two or more isomerism characters to the operator (henceforth, game person) of for example, game equipment. In this kind of love SLG, the parameter which electronized love feeling, the degree of friendship, etc. is used as an element with which the love feeling of an isomerism character is promoted, for example. A game person can enjoy himself, checking by looking the process in which

promote the love feeling of an isomerism character to a game person, and the display gestalt of a character image changes by coping with events, conversation, etc., such as a date, effectively (production) so that it may correspond to the isomerism in everyday life.

[0004]

[Problem(s) to be Solved by the Invention] By the way, it is usual to advance conversation of a game person and an isomerism character in the above love SLG by the interactive directions input which used the predetermined input selection screen, for example, and to make the result of the conversation reflect in the love feeling of the character concerned. Therefore, when the directions input from a game person is not made, game advance will stagnate.

[0005] So, in this conventional kind of SLG, the various devices for demanding a directions input from a game person are made. For example, there are some which showed the game person progress until it results in the maximum response latency time of the directions input from a game person, i.e., the idle time, through the screen interface after the display of an input selection screen until a directions input is made. The contents of a display of a screen interface are beforehand set up for every input selection screen, and the idle passage of time according to alternative is made to specifically display that a game person can check on the specific region of a screen interface.

[0006] However, it is only showing possible [a check by looking of time amount progress until it results in the idle time], and the above-mentioned technique has not carried out making it reflect in the display gestalt of a character image. That is, since a feeling of tension cannot be given to a game person, when a directions input is not made, a game will not still be able to be advanced and the display gestalt of a character image will also become that changeless.

[0007] Then, this invention is to offer the display-control approach of a character image that the directions input situation over an input selection demand can be made to reflect in an image display gestalt. Other technical problems of this invention are to offer the image display control unit suitable for operation of the above-mentioned display-control approach. Other technical problems of this invention are to offer the record medium for realizing the function of the above-mentioned image display control on a computer.

[8000]

[Means for Solving the Problem] The display-control approach of the character image which this invention offers It is the display-control approach in the equipment which

waits for an operator's directions input to a predetermined input selection demand, and performs consecutiveness display processing while displaying the character image accompanied by expression on a display. Whenever it performs said input selection demand in connection with said character image, the elapsed time from immediately after a demand is clocked in the invisible condition to said operator. When this elapsed time reaches the idle time of said directions input and said directions input is not made, it is characterized by changing the expression of the character image [on display] concerned.

[0009] Moreover, the image display control unit which this invention offers An image-processing means to display the character image accompanied by expression on a display, the time check which clocks a demand presentation means to show an operator a predetermined input selection demand, and the elapsed time after showing said input selection demand, in the invisible condition to said operator — with a means an idle-time decision means to determine the idle time of the directions input to said said input selection demand, and the time of said elapsed time reaching said idle time — said — directions-input-do — when there is nothing, it has a means to change the expression of the character image [on display] concerned.

[0010] Moreover, the record medium which this invention offers is a record medium with which the program code for performing the following processing was recorded on the computer connected to an indicating equipment and a data entry unit and in which computer reading is possible.

(1) The processing to which the character image accompanied by expression is displayed on said display, (2) Processing which clocks the elapsed time from immediately after a demand in the invisible condition to an operator while showing an operator the predetermined input selection demand in connection with said character image, (3) — the processing which determines the idle time found about said character image, and (4) — the processing to which the expression of the character image [on display when said elapsed time reaches said idle time and there is no directions input from said data entry unit] concerned is changed.

[0011] The processing which determines said idle time acquires the standard idle time beforehand defined about the character image concerned, and the predetermined parameter based on the directions input situation of said operator's past to the character image concerned, and is processing which determines said idle time based on such acquired information, for example.

[0012] Said program code is characterized by making said computer perform further processing which updates said parameter according to said directions input situation

by said operator. Specifically, this processing is processing which updates said parameter so that the next idle time over the character image concerned may become short, when said directions input by said operator cannot be found.

[0013]

[Embodiment of the Invention] The gestalt of operation at the time of applying the image display control technique of this invention to the video game equipment which realizes love SLG hereafter is explained.

[0014] Here, two or more characters which serve as a candidate for love between game persons are made to appear, and the example in the case of forming the character image accompanied by expression about each character, respectively is shown. Expression changes from many sides according to a game person's directions input situation. The image element data for expressing the expression (the expression of a face, behavior, and speech and conduct being included) of each character image and the love advance element data of a game story, an input selection demand screen and response conversation (words), and sound-source data and others are recorded on CD-ROM used as an example of the record medium of this invention. The standard idle time defined for every character image is recorded on CD-ROM. That to which this standard idle time corresponds considering that identification information as a key when the identification information of a character image is specified is extracted. The program code for forming video game equipment in CD-ROM, when further read by the below-mentioned body of game equipment which is a computer (a game program is called hereafter.) in addition -- what also contains data and a control parameter required for program execution when calling it a game program — carrying out — it records. In addition, in future explanation, a character image may only be called a character in the part which is not in an image processing direct Seki straw. [0015] First, the body of game equipment for constituting the video game equipment of this operation gestalt is explained. By reading and performing a game program from the freely exchangeable above-mentioned CD-ROM, this body of game equipment can control a display gestalt in the display list to the display units 25, such as generation of a character image etc., and a generated character image, and what was indicated by JP, 8-212377, A can be used for it. That is, as shown in drawing 1, Maine Bath B for connecting the main control section 10, the image-processing section 20, the acoustical-treatment section 30, the disk control section 40, the communications control section 50, and each above-mentioned functional block 10-50 possible [two-way communication] is provided, and the body 1 of game equipment is constituted. [0016] The main control section 10 is equipped with CPU11, the circumference device controller 12 which performs interrupt control, DMA (Direct Memory Access) transfer control, etc., the main memory 13 which records a game program and various data temporarily, and ROM14 in which the operating system (OS) which performs management of the image-processing section 20 and acoustical-treatment section 30 grade was stored. CPU11 is RISC(reduced instruction set computing) CPU, and while controlling fundamental actuation of the whole equipment by performing OS currently recorded on ROM14, two or more functional block mentioned later is realized by performing the game program in main memory 13.

[0017] The geometry transfer engine 21 which performs coordinate transformation to the image element which read the image-processing section 20 from the above-mentioned CD-ROM, and was developed by main memory 13 etc. at a high speed (GTE), The graphics processing unit 22 which performs drawing processing of the image which consists of combination, such as a polygon and sprite (polygon of a triangle, a square, etc.), based on the drawing directions from CPU11 (GPU), It has the frame buffer 23 which records temporarily the image in which drawing processing was carried out by GPU22, and the image decoder (MDEC) 24 which decrypts compression image data if needed. A display unit 25 reads and displays the image currently recorded on the frame buffer 23. In addition, a TV apparatus for home use can be used for a display unit 25. In this case, a connection interface with a TV apparatus is established between GPU(s) 22. By performing continuously record to the above-mentioned drawing processing and the frame buffer 23 by GPU22, the character image containing a motion element and its background image can be displayed now on a display unit 25.

[0018] The acoustical-treatment section 30 is equipped with the sound regeneration processor (SPU) 31 which reproduces voice, musical sound, a sound effect, a background sound, and other sounds (following, voice, etc.) based on the sound-source data currently recorded on the above-mentioned CD-ROM, the sound buffer 32 for recording the reproduced voice temporarily, and the loudspeaker 33 which outputs the voice in a sound buffer 32 etc. In addition, SPU31 has the modulation function reproduced after modulating the ADPCM decode function which decodes the sound-source data by which adaptation differential encoding (ADPCM) was carried out, and is recorded on a sound buffer 32, the function which reproduces voice etc. by reproducing the sound-source data in a sound buffer 32, and the sound-source data currently recorded on the sound buffer 32.

[0019] The disk control section 40 is equipped with the disk drive equipment 41 for reproducing the data of the game program recorded on CD-ROM44, and others (henceforth, playback data), the CD-ROM decoder 42 which decodes it when the error correction (ECC)

sign is added to playback data, and the buffer 43 recorded temporarily [before making the playback data from disk drive equipment 41 record on main memory 13]. In addition, the decoder 42 constitutes a part of acoustical-treatment section 30. The audio output of this decoder 42 once goes into SPU31, is mixed with this SPU output, and turns into the last audio output via liver gnat knitting.

[0020] The communications control section 50 is equipped with the communications control device 51 with CPU11 which controls a communication link, the controller 52 which inputs the directions from a game person, and the memory card 53 which records a setup of a game etc. through Maine Bath B. Controllers 52 are the interface components for inputting an intention of a game person. The start key which directs game initiation, the reset key which directs game reset, The selection key which makes cursor in agreement with the menu and item of the versatility displayed while directing migration of the four directions of a character image, And it has the directions key which performs detail actuation directions of a character image, and directions of a selection menu, and the condition of each of these keys is transmitted to the communications control device 51 by synchronous system communication link. The communications control device 51 transmits the condition of each key of a controller 52 to CPU11. Thereby, the directions from a game person are told to CPU11, and CPU11 performs the image display and game expansion processing in which directions were followed from the game person based on the game program currently performed. [0021] Moreover, CPU11 transmits the various data at that time to the communications control device 51, when it is necessary to record the time of a setup of the game

[0021] Moreover, CPU11 transmits the various data at that time to the communications control device 51, when it is necessary to record the time of a setup of the game which is advancing, or termination of a game, or an intermediate result. The communications control device 51 records the transmit data from CPU11 concerned on a memory card 53. Since it dissociates from Maine Bath B, a memory card 53 is in the condition which switched on the power source, and can be detached and attached. Thereby, a setup of a game etc. can be recorded now on two or more memory cards 53.

[0022] In addition, the body 1 of game equipment is equipped with the parallel 1/0 (1/0) port 71 connected to Maine Bath B, and the serial input/output (1/0) port 72. And connection with a peripheral device can be made now through parallel 1/0 Port 71. Moreover, the communication link with other video game equipments etc. can be performed now through serial 1/0 Port 72.

[0023] In the body 1 of game equipment constituted as mentioned above, if powering on or reset processing is performed where disk drive equipment 41 is equipped with CD-ROM44, OS by which CPU11 is recorded on ROM14 will be performed. If OS is performed, CPU11 controls the disk control section 40, will read the game program currently

recorded on CD-ROM44 to main memory 13, and will perform it while initializing the whole equipment, such as a check of operation. The data recorded on the memory card 53 are also read at any time in that case. By this game program execution, CPU11 forms functional block as shown in drawing 2, and realizes video game equipment 2. [0024] As shown in $\frac{drawing 2}{drawing 2}$, the video game equipment 2 of this operation gestalt possesses functional block of the directions analysis section 211, the screen interface section 212, the idle time management section 213, the character Management Department 214, the character processing section 215, the character data file 216, the background Research and Data Processing Department 217, the background information processing section 218, the background information data file 219, and the image Management Department 220 at least, and is constituted. [0025] The directions analysis section 211 decodes the directions input from the controller 52 inputted through the above-mentioned communications control device 51, and performs necessary data control. As a directions input, there are assignment of the character image from a game person, behavior assignment of the character image, alternative assignment of conversation, etc. For example, when the display of a specific character image is directed, the directions analysis section 211 makes the image Management Department 220 send out the standard idle time and the parameter about an image element and its character image of the character image concerned set up as a default through the character Management Department 214 and the character processing section 215 from the character data file 216, and the character image accompanied by expression is displayed on a display unit 25 with these data. [0026] When the directions analysis section 211 develops the save data in the game program in CD-ROM44, or a memory card 53 to main memory 13, and prepares an environment required for game advance again, when game initiation thru/or a restart have been recognized, and game interruption has been recognized, the function which saves the information for parameter decision about a game advance situation and the character image by which it is indicated by current to a memory card 53 as mentioned above also has.

[0027] Various menu screens and an item for a game person to make a self intention easy for the screen interface section 212 to be a game advance process, and to input interactively through a controller 52, For example, the character selection-menu screen for choosing the character image which a game person wishes to have, The input selection screen for requiring a directions input of a game person in the character setting menu screen for making various setup about a character easy and a game advance process is created, and it outputs to the image Management Department 220. Alternative

[parameter / which is mentioned later /, for example, friendship,] is assigned to it at each alternative. Moreover, the image element for changing the expression later mentioned for every alternative is assigned. A game person will perform a directions input through these screens displayed on a display unit 25 through the image Management Department 220. The screen interface section 212 is constituted again so that the count repeat output of predetermined of the input selection screen may be carried out based on a command.

[0028] The idle time-management section 213 has the function of detecting the time-amount progress at the time, at the time of the function of calculating the idle time [as opposed to / whenever the screen interface section 212 performs an input selection demand through a predetermined input selection screen / the input selection screen], the function which clock elapsed time until it results [from immediately after a demand] in the idle time in an invisible condition to a game person, and an idle, when a directions input is to the function and the idle time which detect in the existence of the directions input of a throughout. In addition, it says not making time amount progress display it on a display unit as an invisible condition. [0029] The idle time is time amount defined with the function of the standard idle time defined for every above-mentioned parameter element, i.e., a character image, and the parameter based on the directions input situation of a game person's past to a character image on display. The standard idle time is recorded on the above-mentioned CD-ROM, and the parameter is recorded on the above-mentioned memory card 53. In case these record data prepare a game environment, they are stored in the character data file 216.

[0030] The standard idle time is beforehand set up according to the character description about each character image. For example, about the character of the calm character, it is set up for a long time relatively, and is shorter set up about the character of quick-tempered character. Drawing 3 is drawing having shown an example of the standard idle time stored in the character data file 216. in the example of drawing 3, quite long time amount is set up about the character E, and there is no idle time substantially — it is alike and equal. Conversely, about a character N, the idle time will pass immediately. A game person can know such time amount no longer. [0031] A parameter is a multiplier to which the idle time is specifically changed according to the directions input situation over an input selection demand. With this operation gestalt, the adjusted value chosen based on the feeling correction factor to which each character uses whenever ["whenever / friendship /"], and whenever

["whenever / palpitation /"] as an element to a game person as a parameter, and this feeling correction factor is used. In the input selection screen for conversation, it will increase, if the alternative on which whenever [favorable] leans in the case of conversation with a specific character is chosen, or it reacts promptly in case alternative is chosen, and "whenever [friendship]" will decrease, if dysphoria does not choose alternative in the case of conversation or does not input directions in the idle time conversely at it. "Whenever [palpitation]" is fluctuated according to the character, for example, the method of selection of an event mentioned later, the contents of behavior of the game person in the case of an event, etc. Drawing $\underline{4}$ is the graph with which the relation of this feeling correction factor was expressed typically, and has shown signs that feeling correction factors differ for every character. A feeling correction factor is used in order to choose the adjusted value of feeling (I-V) as shown in drawing 5 . That is, when whenever [friendship], or whenever [palpitation] are low (that is, a feeling correction factor is low), the adjusted value which becomes large is chosen in the negative direction by the case. Conversely, the adjusted value which becomes large is chosen in the forward direction as a feeling correction factor becomes high. The idle time turns into time amount which added this adjusted value together to the standard idle time.

[0032] The screen interface section 212, the character Management Department 214, and the background Research and Data Processing Department 217 are notified of the existence of the directions input of a throughout, and the information on the time amount progress at the time of a directions input being carried out at any time at the time of this idle.

[0033] The character Management Department 214 performs management of each character based on the notice of the screen interface section 212 or the idle time management section 213, and the record data of the character data file 216. For example, the parameter corresponding to each character is corrected at any time according to a game person's directions input situation. Moreover, according to a directions input situation, the various image elements and the current parameter of a character image are ****(ed), and this is sent to the character processing section 215.

[0034] The character processing section 215 performs processing for a display unit 25 to express the expression of a character based on the above-mentioned image element and a parameter element.

[0035] The background Research and Data Processing Department 217 manages background information for expressing the background environment of a character. Background information is the information for expressing the event by which a date and a character

participate and are held, and is recorded on the background information data file 219. The background information processing section 218 **** background information which corresponds from the background information data file 219 at any time, has two incomes with the background Research and Data Processing Department 217, and creates the data for a display of the background environment of a character. The image Management Department 220 generates a character image with expression, and its background image using the above-mentioned GTE21 and GPU22, and displays this on a display unit 25. Moreover, various menu screens, the window for an item or character introduction data display, etc. are suitably displayed on a display unit 25. [0036] Next, the display-control approach using the video game equipment 2 of this operation gestalt is explained with reference to $\underline{\text{drawing 5}}$ and $\underline{\text{drawing 6}}$. In $\underline{\text{drawing}}$ $\underline{5}$, if game initiation is directed through a controller 52 from a game person, the directions analysis section 211 will judge whether it is manual assignment (step S101). As for the case of manual assignment, (step S101:Yes) and a game person perform selection and a setup of a character and background information through a predetermined menu screen (step S102). On the other hand, when it is not manual assignment, the character and background information on default assignment are set automatically (step S103).

[0037] If a character etc. is set up, the character Management Department 214 and the background Research and Data Processing Department 217 **** the image element and parameter element corresponding to these characters and background information from the character data file 216 and the background information data file 219. And processing necessary at the character processing section 215, the background information processing section 218, and the image Management Department 220 is performed to these data, and the character image accompanied by expression and its background image are displayed on a display unit 25 (step S104).

the input selection screen for demanding a directions input from a game person, for example, a conversation selection screen with a character, on a display (step S105). The idle time management section 213 clocks the elapsed time ignited by the display of a conversation selection screen while calculating the current idle time corresponding to the character (step S106). It is made not to display an idle passage-of-time situation on a screen at this time. The operation of the idle time is performed by adding together the parameter (forward forward value / negative value) corresponding to the character to the standard idle time as mentioned above.

[0039] When the directions input from a game person is not made in the idle time,

it moves to processing on the right-hand side of (step S107:No) and <u>drawing 4</u>. That is, the parameter about the character is updated at the character Management Department 214 (step S110). It updates so that it may specifically originate in the directions input by the game person not having been made and whenever [friendship] may be lowered.

[0040] Then, in the data for expressing the expression resulting from there having been no directions input using the character Management Department 214 and the background Research and Data Processing Department 217, and this example, the data for forming the background image showing the expression with which the character image got angry, and its situation are ****(ed) from the character data file 216 and the background information data file 219. And the image processing for expressing the expression which got angry in the character processing section 215 and the background information processing section 218 is performed, and it is displayed on a display unit 25 through the image Management Department 220 (step S111).

[0041] In the idle time management section 213, a count in case a directions input is not made is counted up in parallel to the above-mentioned processing (step S112). If the count after count-up becomes in the count set up beforehand (step S113: No), the conversation selection screen of the contents which urge return and a directions input to step S105, or the same contents as the beginning will be displayed. The expression of the character at this time is the thing of an angry expression. Thus, when the idle time passes with no directions input by the game person after the conversation selection screen was displayed, the parameter used for the operation of the next idle time is updated, and it is made to reflect in the expression of a next character. This is repeated the number of predetermined times.

[0042] On the other hand, in step S107, when a directions input is made in the idle time, left-hand side of (step S107:Yes) and drawing 7 is processed. That is, the data for displaying the scene according to the display image based on the directions input, i.e., the contents of selection of conversation, using the character Management Department 214 and the background Research and Data Processing Department 217 are ****(ed) from the character data file 216 and the background information data file 219. And based on this data, an image processing is performed in the character processing section 215 and the background information processing section 218, and that result is displayed on a display unit 25 through the image Management Department 220 (step S120). The character Management Department 214 updates a corresponding parameter according to the point assigned to the selected contents of conversation again (step S121). This point is reflected in whenever [to the game person of a

character / friendship].

[0043] Evaluation at the time of receiving the directions input after processing of steps S120 and S121 or after displaying a conversation selection screen in the idle time management section 213 in parallel to these processings if needed is performed. When it judges a directions input "is short" in a certain specific conversation selection screen as compared with the whole idle time (i.e., when a game person performs input directions quickly), specifically, the character Management Department 214 is notified of that (step S122: short). The character Management Department 214 updates a parameter so that whenever [friendship / of the character] may go up (step S123). On the other hand, in step S115, a directions input does not (step S122: usually) update a parameter, when it is considered that the idle time is the equivalent.

[0044] when processing of the above-mentioned steps S122 and S123 is completed, the directions input from a game person should do — when predetermined ************************ of the case which is not is carried out, (step S113:Yes) is performed, a scene change is made, and a character and background environment is also rechosen suitably and repeats the processing after step S105 (step S124: No, S125). When termination of a game is directed, a parameter is saved to a memory card 53 if needed, and processing is finished (step S124: Yes).

[0045] Also when the interruption in a game is directed through a controller 52, a parameter is saved to a memory card 53 if needed. The parameter saved to the memory card 53 is read when it judges with "continuation" in the directions analysis section 211. Thereby, the resumption of simulation from the time of a game person being ended thru/or interrupted is attained. In addition, although the above explained as what is maintaining the expression on which the idle time does not change and the cycle concerned also begins a character as for the inside of each cycle when directions input by the game person or expiration of the idle time was made into 1 cycle from the display of a conversation selection screen, the idle time may be corrected at any time also in a cycle, or you may make it the expression of a character change every moment. In this case, to clock the elapsed time after the display of a conversation selection screen for between [every] the two or more continuous division, and what is necessary is just made to perform the same processing as every above-mentioned cycle.

[0046] Next, drawing 8 -12 explain the example of the character image actually displayed on a display unit 25 by the above-mentioned display-control approach. Display screen 5A of the drawing 8 upper case is an example of the display screen

after processing of the above-mentioned steps \$104 and \$105. Here, the scene which carries out the directions input of the conversation to a character alternatively is expressed from the game person, and the alternative of the conversation by 3 ** is displayed on the front face of a character. A game person chooses the target conversation through a controller 52. A selected conversation is expressed as the gestalt of a reversed character like illustration.

[0047] Display screen 5B of the lower berth expresses the condition that the display gestalt of a character changed, based on the conversation which the game person chose. In this display screen 5B, it is based on the conversation "it is like [a love story] 1 scene." chosen by the game person, and the character is changing to the expression "seems to be glad" as compared with display screen 5A. moreover, the conversation chosen from the game person — corresponding — the response conversation of a character -- "-- I also thought so. it was having a longing just for a moment saying like this --. " -- it is displayed on the front face of the character concerned. In this case, whenever [friendship/which a character holds to a game person] improves by conversation chosen by the game person. Moreover, it is based on whenever [friendship / which improved] and the idle time in the character concerned becomes longer than the case where display screen 5A is displayed. Thus, subsequent games advance based on change of the display gestalt of the selection input of the conversation from the alternative display - game person of conversation to a game person - a character, and correction of the renewal of response conversation - a parameter - the idle time.

[0048] Display screen 6A of the <u>drawing 9</u> upper case is the same input selection screen as the above-mentioned display screen 5A, and means that the conversation "is a walk hungry?" shown by the game person by the reversed character was chosen. It is changing to the expression whose display screen 6B of the lower berth "seems to be dissatisfied with a character" as compared with display screen 6A corresponding to the conversation "is a walk hungry?" chosen by the game person. Moreover, the conversation accompanying the expression change concerned also in the response conversation of a character "it ** and meets. with much trouble, easygoing — a part — it was — a thing —. "— it is displayed on the front face of the character concerned. In this case, whenever [in the parameter of a character / friendship] falls by conversation chosen by the game person. Moreover, the idle time in the character concerned becomes shorter than the case where display screen 6A is displayed, by whenever [lowered friendship]. [0049] Display screen 7A of the <u>drawing 10</u> upper case is the above-mentioned display screens 5A and 6A and the same input selection screen, and means that the conversation

"true and a feeling are good." shown by the game person by the reversed character was chosen. Although the conversation "true and a feeling are good." chosen by the game person is supported in display screen 7B of the lower berth, the expression of a character is in the condition of the same expression as display screen 7A, without changing. That this expression change is not made means that the conversation chosen from the game person does not change the feeling over a character as compared with the above-mentioned display screens 5B and 6B. On the other hand, although expression change is not carried out, the response conversation "I try to want to be able to take the daily fatigue" of the character corresponding to the conversation chosen by the game person is displayed on the front face of the character concerned. [0050] Display screen 8A of the <u>drawing 11</u> upper case is the same input selection screen as the above-mentioned display screen 5A, and expresses the scene where a directions input is not made in the idle time. Therefore, the expression of a character is changing without the 1st directions input to the expression "about which it seems to be anxious." Moreover, the conversation "why is it silent?" accompanying this expression change is displayed, and the directions input of the conversation to a game person is urged also to the response conversation of a character. Furthermore, since a directions input is not made, also whenever [in the parameter of a character / friendship] is falling. Therefore, the idle time in this character is shorter than the case where the first display screen 8A is displayed. [0051] Display screen 9A of the <u>drawing 12</u> upper case expresses the input selection screen after carrying out game advance further from display screen 8B. The expression of a character becomes being the same as that of the case of display screen 8B, and only the alternative of conversation is repeated. Display screen 9B of the lower berth expresses the scene where the condition without a directions input was repeated the number of predetermined times, to the alternative of the conversation currently displayed on the front face of this character. In the example of illustration, a character compares from display screen 9A, and it is changing to an "angry" expression. moreover, the conversation accompanying this expression change also in the response conversation of a character — "-- what -- He is absent-minded and it shines! say some without being silent, and be in a lack -- " -- it is displayed. In this case, whenever [by the character / friendship], it falls further and what also has the adjusted value low at a stretch shown in $\frac{drawing 5}{drawing 5}$ comes to be chosen. Thereby, the idle time in this character becomes short at a stretch [before displaying display screen 9A]. Thus, when a directions input is not made in the idle time, different consecutiveness processing from the case where a directions input is made is performed. [0052] In addition, the above example is an example in the case of a comparatively quick-tempered character. You may make it make it change to the expression "got angry" immediately, without urging the directions input to a game person like the above-mentioned display screen 8B in the case of a more quick-tempered character. Moreover, in background environments, such as a date and an event, after a character makes it change to an "angry" expression, you may make it a screen configuration which returns angrily. On the contrary, you may make it repeat the same expression repeatedly in the case of the character of the calm character. These can respond by changing suitably the adjusted value shown in the standard idle time shown in drawing 5.

[0053] By this changing expression of a character, whenever [response-time / in the directions input of self /, inclination / of response conversation /, and friendship] falls, and a game person can check condition by looking now.

[0054] The character image shown in the display screens 5A-9B in above-mentioned drawing 8 - drawing 12 and its background environmental image cannot be limited to this example, and can deform into arbitration in consideration of production which raises the interest nature to a game person. That is, what is necessary is just to constitute suitably by formulating a character image and a background information image in the classification of the idle time of the explicit assignment from a game person, the response conversation by which a directions input is alternatively carried out from a game person, and a directions input etc. beforehand, and matching them with it, so that it may be displayed with the gestalt to which a corresponding display image corresponds. This becomes possible [enjoying visual change of the character image which makes kaleidoscopic changes on real time based on a directions input, and a background environmental image] from a game person.

[0055] Thus, with the video game equipment 2 of this operation gestalt, since this idle time is made to become short and it was made to decrease whenever [to the game person of a character / friendship] when the idle passage of time after an input selection demand was clocked in the invisible condition to a game person and there was no directions input, a feeling of tension can be given to a game person's directions input, and the stagnation in a game advance process can be avoided.

[0056] Moreover, by using whenever [friendship / which a character holds to a game person] as one parameter for changing the expression of the character serially, expression change of the more nearly many-sided expression gestalt in which the directions input situation from a game person was made to reflect, i.e., a character image, can be checked by looking now, and the high game of interest nature becomes

realizable.

[0057] Although this operation gestalt is as above, a personal computer can be similarly carried out by carrying out loading of the record medium of this invention. Moreover, although the example at the time of being made to perform a directions input through the screen interface section 212 was given with the above-mentioned operation gestalt, the configuration which performs an input selection demand and a directions input using audio input units, such as a microphone, for example is also possible, without being limited to such a configuration. In this case, while making it connect with Maine Bath B of the body 1 of game equipment and providing the voice input section which changes into digital data the voice data inputted through an audio input unit, functional block of the voice input processing section which voice data is acquired [section] and makes the character Management Department 214 and the background Research and Data Processing Department 217 have two incomes is made to provide. [0058] Moreover, effectiveness equivalent to the above-mentioned video game equipment 2 comes to be acquired by functional block of the idle time management section 213 detecting the idle time of the voice input corresponding to the game advance from an operator, and constituting so that the character Management Department 214 and the background Research and Data Processing Department 217 may be made to have two incomes.

[0059]

[Effect of the Invention] since the expression of a character image changes based on the idle time of a directions input according to this invention so that clearly from the above explanation, it is effective in interest nature, such as a game, being markedly alike and increasing. Moreover, since the display gestalt of an image changes according to the directions input to an input selection demand, it is effective in a many-sided image expression gestalt becoming possible.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The hardware configuration Fig. showing the example of the body of game equipment with which this invention is applied.

[Drawing 2] The functional block diagram showing the example of a configuration of the video game equipment concerning 1 operation gestalt of this invention.

- [Drawing 3] The graph having shown an example of the standard idle time.
- [Drawing 4] The graph which showed an example of a parameter.
- [Drawing 5] The graph having shown an example of the adjusted value based on feeling.
- [Drawing 6] The procedure Fig. in the video game equipment of this operation gestalt.
- [Drawing 7] The procedure Fig. in the video game equipment of this operation gestalt.
- [Drawing 8] Drawing showing an example of the display image by this operation gestalt.
- [Drawing 9] Drawing showing an example of the display image by this operation gestalt.
- [Drawing 10] Drawing showing an example of the display image by this operation gestalt.
- [Drawing 11] Drawing showing an example of the display image by this operation gestalt.
- [Drawing 12] Drawing showing an example of the display image by this operation gestalt.

[Description of Notations]

- 1 Body of Game Equipment
- 2 Video Game Equipment
- 10 Main Control Section
- 20 Display and Control Section
- 25 Display Unit
- 30 Sound Control Section
- 40 Disk Control Section
- 50 Communications Control Section
- 52 Controller
- 211 Directions Analysis Section
- 212 Screen Interface Section
- 213 Idle Time Management Section
- 214 Character Management Department
- 215 Character Processing Section
- 216 Character Data File
- 217 Background Research and Data Processing Department
- 218 Background Information Processing Section
- 219 Background Information Data File
- 220 Image Management Department